Ballast water and foreign invasive plants

I am Donna Starr, resident of Blaine, Washington. I have been a school teacher for 44 years and am preparing to teach a 17 week course on Plants and Seeds this next semester.

In researching topics for the course outline, I included plant invasive species and how they are spread. I am very concerned about the amount of invasive plant species that will be carried into the Salish Sea via empty coal transport tankers.

Huge amounts of sea water will be needed to fill the ballast of returning empty ships. This water will be emptied into our local waters accidentally introducting both plant and animal species that will have a detrimental, devastating impact on our local native species populations and environment.

When non-native species are introduced into a new environment, they compete with the native species. The local ecosystem is often challenged to stay healthy and thriving and usuallly loses the battle. Extinctions of native plants and animals often occur, more often than not.

Hawaii suffers from invasive species, kudzu in our American south is an invading species. We already suffer from foreign mussel inundation and infestation. Our herring nutrition supply for Salmon, Dungeness crab, ling cod and shellfish industries, and these species themselves can not survive infestation. What will be the cost of trying various mitigations? What will be the economic consequences of losing these industries?

The invasion of foreign species question does not even include the mixture of water chemistry challenges. Our shellfish industries are already suffering from acidification of local waters, could invading species include organisms that further change the ph of our coastal waters? (such as bacterial growth eliminating oxygen)

We need to know, specifically:

1. What invading species might be imported in Ballast water?
2. What might be the impact of these species?
3. What might be the chemical impact of foreign water?
4. What strategies might we need to employ, and at what expense, to mitigate the invading species and chemical impact?
5. Do we have the technology to sanitize ballast water and alter ph as needed?
6. What do we do about microbes that have not even been discovered, named or evaluated yet that might impact our environmental and economic infrastructure?

Please study these impact questions.

Thank you,
Donna Starr